

What Is Claimed Is:

1. A magnetic device for implanting in a tissue passage in a patient.
2. The magnetic device defined in claim 1 comprising structure for penetrating tissue of the passage wall.
3. The magnetic device defined in claim 2 wherein the structure is configured to resist removal of the device from the passage wall.
4. The magnetic device defined in claim 1 wherein at least substantially all exterior surfaces of the device are made of biocompatible materials.
5. The magnetic device defined in claim 1 comprising a quantity of actively magnetic material.
6. The magnetic device defined in claim 1 comprising a quantity of passively magnetic material.
7. A magnetic device configured for implanting on an interior surface of a tissue passage in a patient.
8. The magnetic device defined in claim 7 comprising structure for penetrating tissue of the passage wall.
9. The magnetic device defined in claim 8 wherein the structure is configured to resist removal of the device from the passage wall.

10. The magnetic device defined in claim 7 wherein at least substantially all exterior surfaces of the device are made of biocompatible materials.

11. The magnetic device defined in claim 7 comprising a quantity of actively magnetic material.

12. The magnetic device defined in claim 7 comprising a quantity of passively magnetic material.

13. A method of treating a tissue passage in a patient comprising:

implanting at least two magnetic devices in the passage so that the devices are positioned for magnetic interaction with one another.

14. The method defined in claim 13 wherein the magnetic devices transfer force due to the magnetic interaction to the passage wall.

15. The method defined in claim 14 wherein each magnetic device transfers force due to the magnetic interaction to a respective portion of the passage wall.

16. The method defined in claim 13 wherein the magnetic interaction is predominantly magnetic attraction.

17. The method defined in claim 13 wherein the magnetic devices are implanted so that the magnetic interaction between them is predominantly transverse to a longitudinal axis of the passage.

18. The method defined in claim 13 wherein the magnetic devices are implanted so that the magnetic

interaction between them is across a lumen of the passage.

19. The method defined in claim 13 wherein the implanting is performed intraluminally with respect to the passage.

20. The method defined in claim 13 wherein the implanting comprises:

passing at least one of the magnetic devices along a lumen of the passage; and

securing the at least one magnetic device to the passage wall after the passing has conveyed that device to a desired location in the passage.

21. The method defined in claim 20 wherein the securing comprises:

penetrating the passage wall with a retaining structure for the at least one magnetic device.

22. The method defined in claim 13 further comprising:

changing the magnetism of at least one of the magnetic devices in vivo after the implanting.

23. The method defined in claim 22 wherein the changing is performed intraluminally with respect to the passage.

24. The method defined in claim 22 wherein the changing is performed by means that are passed along the inside of the passage adjacent to the at least one of the magnetic devices.

25. The method defined in claim 13 further comprising:

marking a location in the passage that is to receive at least one of the magnetic devices prior to the implanting.

26. The method defined in claim 25 wherein the marking is performed intraluminally with respect to the passage.

27. The method defined in claim 13 further comprising:

removing at least one of the magnetic devices subsequent to the implanting.

28. The method defined in claim 27 wherein the removing is performed intraluminally with respect to the passage.

29. Apparatus for treating a tissue passage in a patient comprising:

means for implanting at least two magnetic devices in the passage so that the devices are positioned for magnetic interaction with one another.

30. The apparatus defined in claim 29 wherein the means for implanting comprises:

means for securing at least one of the magnetic devices to the passage wall.

31. The apparatus defined in claim 30 wherein the means for securing comprises:

means for causing a portion of the at least one magnetic device to penetrate the passage wall.

32. The apparatus defined in claim 29 wherein the means for implanting is configured for intraluminal operation with respect to the passage to at least some extent.

33. The apparatus defined in claim 29 wherein the means for implanting is configured to deliver at least one of the magnetic devices into the passage intraluminally.

34. The apparatus defined in claim 33 wherein the means for implanting is further configured to secure the at least one of the magnetic devices to the passage wall intraluminally.

35. The apparatus defined in claim 29 wherein the means for implanting is configured to implant the magnetic devices at respective locations on the passage wall that are spaced from one another around the passage.

36. The apparatus defined in claim 35 wherein the respective locations are on respective opposite sides of a lumen of the passage.

37. A system for treating a tissue passage in a patient comprising:

apparatus as defined in claim 29; and
means for marking a location in the passage for use as a reference in subsequent use of the apparatus.

38. The apparatus defined in claim 29 further comprising:

means for changing the magnetism of at least one of the magnetic devices in vivo.

39. The apparatus defined in claim 38 wherein the means for changing is configured for operation intraluminally with respect to the passage.

40. The apparatus defined in claim 29 further comprising:

means for removing at least one of the magnetic devices from the passage.

41. The apparatus defined in claim 40 wherein the means for removing is configured for operation intraluminally with respect to the passage.

42. A magnetic device for implanting in tissue of a patient adjacent a tissue passage of the patient.

43. A magnetic system including a magnetic device as defined in claim 42 and further comprising:

a second magnetic device for implanting on a surface of the tissue passage adjacent the first-mentioned magnetic.

44. The system defined in claim 43 wherein, in use, magnetic attraction between the first-mentioned magnetic device and the second magnetic device holds the second magnetic device in place on the surface of the tissue passage.

45. A magnetic assembly for implanting in a patient comprising:

a first magnetic device for implanting in tissue of the patient beneath a surface of that tissue; and

a second magnetic device for positioning on the surface adjacent the first magnetic device.

46. The assembly defined in claim 45 wherein, in use, magnetic attraction between the first and second magnetic devices holds the second magnetic device in place on the surface.

47. A magnetic implant structure for use in a patient comprising:

a magnetic device; and

a member for securing the magnetic device to a surface of tissue in the patient.

48. The structure defined in claim 47 wherein the member is configured to penetrate the tissue adjacent the magnetic device.

49. The structure defined in claim 48 wherein the member is magnetic.

50. The structure defined in claim 48 wherein the member is configured to resist withdrawal from tissue it has penetrated.

51. The structure defined in claim 48 wherein the member is configured to pass through the magnetic device.

52. The structure defined in claim 51 wherein the member is configured to be extended from tissue adjacent a first side of the magnetic device,

through the magnetic device, and into tissue adjacent a second side of the magnetic device.

53. A method of treating a tissue passage in a patient comprising:

implanting at least two magnetic devices adjacent the passage so that the devices are positioned for magnetic interaction with one another.

54. The method defined in claim 53 wherein at least one of the magnetic devices is embedded in tissue beneath a surface of the passage wall.

55. The method defined in claim 54 wherein the at least two magnetic devices comprise a set, and wherein the method further comprises:

implanting a third magnetic device adjacent the passage at a location that is spaced from the set but so that the third magnetic device is positioned for magnetic interaction with at least one of the magnetic devices in the set.

56. Apparatus for treating a tissue passage in a patient comprising:

means for implanting at least two magnetic devices adjacent the passage so that the devices are positioned for magnetic interaction with one another.

57. The apparatus defined in claim 56 wherein the means for implanting is configured to embed at least one of the magnetic devices in tissue beneath a surface of the passage wall.

58. The apparatus defined in claim 57 wherein the at least two magnetic devices comprise a set, and wherein the apparatus further comprises:

further means for implanting a third magnetic device adjacent the passage at a location that is spaced from the set but so that the third magnetic device is positioned for magnetic interaction with at least one of the magnetic devices in the set.